

Title (en)  
Near infrared polymerization initiator.

Title (de)  
Polymerisationsinitiator verwendbar in der Nähe von Infrarot.

Title (fr)  
Initiateur de polymérisation utilisable dans l'infrarouge proche.

Publication  
**EP 0438123 B1 19950913 (EN)**

Application  
**EP 91100422 A 19910115**

Priority  
JP 696190 A 19900116

Abstract (en)  
[origin: EP0438123A2] A near infrared polymerization initiator comprising a near infrared ray-absorbing cationic dye showing absorptions in the near infrared region, which is represented by the following general formula (1):  $D^{<+>}.A^{<->}$  (1) wherein  $D^{<+>}$  represents a cationic dyestuff having absorptions in the near infrared region, and  $A^{<->}$  represents an anion, and at least one member selected from the group consisting of boron-containing sensitizers represented by the following general formula (2):  $<CHEM>$  wherein R1, R2, R3 and R4 independently represent an alkyl, aryl, alkaryl, allyl, aralkyl, alkenyl, alkynyl, alicyclic, or saturated or unsaturated heterocyclic group, with the proviso that at least one of R1, R2, R3 and R4 represents an alkyl group having 1 to 8 carbon atoms, and R5, R6, R7 and R8 independently represent a hydrogen atom or an alkyl, aryl, allyl, alkaryl, aralkyl, alkenyl, alkynyl, alicyclic or saturated or unsaturated heterocyclic group, and organic peroxides.

IPC 1-7  
**C08F 2/46**; **G03F 7/029**

IPC 8 full level  
**C08F 2/50** (2006.01); **C08F 2/46** (2006.01); **G03F 7/029** (2006.01)

CPC (source: EP KR)  
**C08F 2/46** (2013.01 - EP KR); **G03F 7/029** (2013.01 - EP)

Citation (examination)  
• Chemical Abstracts 111(26):244365Z & JP-A-01013142 (FUJI) 18-01-89.  
• Chemical Abstracts 110(16):145036R & JP-A-63208036 (CANON KK) 29-08-88.

Cited by  
US8048607B2; US6316089B1; US5852067A; EP1002817A3; EP1223196A3; EP1849836A3; EP1096315A1; US2012094233A1; US8900798B2; EP1006116A1; US6261737B1; EP0922727A1; GB2283489A; GB2283489B; GB2415701A; GB2415701B; EP1249343A3; WO9944099A1; WO2020118116A1; US12043619B2; US7723445B2; WO2020239564A1; US7189494B2; WO2018041935A1; US10597515B2; US11292778B2; WO2023156485A1; WO2023161049A1; US7056639B2; EP0775706A2; EP2402315A1; US7429445B1; WO2010108835A1; US8916621B2; WO2020114902A1; US7470015B2; US6864040B2; US9701762B2; WO2008138732A1; WO2011119342A1; WO2015036910A1; US9957258B2; US10793555B2; EP0921921B1; US6566035B1; WO2012145162A1; WO2012101245A1; US9644068B2; WO2020239563A1; US6174642B1; WO2011012560A1; WO2012045736A1; US8906979B2; WO2016034963A1; US10113075B2; WO2020046865A1; WO2013083505A1; US9365515B2; WO2022074120A1; IT202000023815A1; WO2009038038A1; WO2010108862A1; WO2019090218A1; WO2024074945A1; WO2008090640A1; US9796740B2; EP3459957A1; WO2019231491A1; WO2019231492A1; US11952453B2; US6797449B2; US9051397B2; US10106629B2; US10487050B2; WO2020152120A1; WO2021070152A1; US7291438B2; WO2021175855A1; WO2022258568A1; IT202100014885A1; US7252922B2; US6486225B1; WO2011050442A1; WO2013167515A1; US8932398B2; WO2015004565A1; EP2963014A1; EP2963015A1; EP2963016A1; US9864273B2; EP3354641A1; US10488756B2; WO2020049378A1; US11204554B2; US11209733B2; US11209734B2; EP0774492A2; WO2011020727A1; US9310676B2; WO2018220605A1; WO2020136522A1; US10884182B2; US11256028B2; WO2022207945A2; WO2022238592A2; WO2022238591A1; EP4273200A1; WO2023214010A1

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DOCDB simple family (application)  
**EP 91100422 A 19910115**; DE 69112852 T 19910115; JP 313891 A 19910116; KR 910000663 A 19910116